## THERMapp chair

Transferring Heat Energy from Rock Matrix: assessing, partitioning, predicting (THERMapp)





## Under the assumption that there are only few natural geothermal systems perfect for power-plants installations, many developments for efficient geothermal energy involve creating in deep hot crustal rocks fracture networks for enhanced fluid flow: the Enhanced Geothermal Systems (EGS).

However, by creating large stresses and fracturing the media, this method could induce tremors and earthquakes in some cases. Moreover, albeit ascertaining the high temperature and hydraulic conductivity conditions, EGS methods might not allow for the most efficient geothermal energy production.

While its results are equally adapted to monitoring purposes for EGS, THERMapp aims to provide an alternative approach answering the questions:

- · Might host reservoir rocks for efficient geothermal potential naturally exist?
- Is there a reservoir-dependent production procedure to follow for long-term integrities?
- If so, can we predict both of these?



Lucas Pimienta, obtained an Eng.D. from EOST (Strasbourg) and a Ph.D. from ENS (Paris) in geophysics. He specialises on the understanding of rocks physical properties, with a particular interest toward geo-engineering applications such as geothermal energy or CO2 geological storage.